

5.

Hygiene Of
Circulation, Clothing, Bathing,
&
Excretions.



HYGIENE OF THE
CIRCULATION.

The broad tapeworm is peculiar to Central Europe & ~~the~~ ^{the} ~~atmospheric~~ ^{atmospheric} ~~blood~~ ^{blood} ~~in~~ ⁱⁿ ~~the~~ ^{the} ~~climate~~ ^{climate} we turn to the next great division: — Hygiene of the circulation of the blood.

It is ^{very} important to keep a balance of circulation.

HEART.

The heart must be in a sound state & there must be no obstruction of the veins & arteries.

HEAD.

The balance of blood in the head is the most ^{in need of care} ~~important~~. "Keep the head cool & the feet warm". The brain is in a close box which does not allow expansion. When much blood is in the feet, they swell, ~~innocently~~.

ADAPTATION
OF
THE BRAIN.

To adapt the brain to changes the carotids are contorted. In sleep the least possible amount of blood goes through. Excess of blood in the brain endangers life. Some vibratory movement is necessary.

The veins carry the blood back as fast as it goes into the brain.

✕ Theory & relief of insomnia,

Space & space

Blumhardt. end of 18th century
anticipated the theory —

Sandy in 1821 do. an attack

Durham later - experiments
Hammond —

CEREBRO-SPINAL
FLUID.

STOOPING.

The cerebro-spinal fluid, common to both brain & spinal marrow, goes down when there is an excess of blood in the brain.

We should avoid ^{unnecessary} stooping positions. ~~All~~ Especially should ~~the~~ persons doing it.

The effect of the ~~application~~ application of cold, is well known. We put cold water to a hot head.

WRAPPING
INFANTS
IN CLOTHES.

It is an error in ^{management of} children to put a large cap on the head. It is ~~unnecessary~~. A want of knowledge leads to the practice of heaping blankets on children, thus excluding fresh air and often making the children sick. ^{poor}

HEART.

The heart should be sound. It is disturbed by excessive exercise. When we exercise our muscles, the heart by synergy acts with them. If we run the pulse runs also.

HYPERTROPHY.

Hypertrophy, or enlargement of the heart may result. This is caused by either obstruction of the valves, or

Dr. Cornelius Black on importance of pure air
to continuance of life in persons with fatty or
organically diseased hearts after middle life

Art. 1.
Dr. Stille
Dr. La Costa.

Extemporize here
[Space 1 page]

Although disease of the heart is mentioned as
more frequent among soldiers than among civilians. A
Common cause is,
the weight & undue pressure
of the accoutrements —
the knapsack, &c.

[End of 11th Lecture, 1872.]

Alexander Brown Essay, 1871, by ——— ?

Dr. Cornelius Black's observations on the influence of
insufficient aeration of the blood in promoting degenerative dis-
ease of the (right) heart after middle life; especially fatty
degeneration, Brown imperfect oxidation & removal of muscular tissue.

prolonged violent efforts or excitement of the heart.



ATROPHY.

by exercise. Firemen often have this disease. It is also caused by excessive gymnastic exercise: cricket, rowing, &c. Over-exertion often produces atrophy instead of hypertrophy. ~~Portion~~ ^{falling} requires nourishment & rest.

COMMON DISEASE TO SOLDIERS.

~~It is common~~ among soldiers, who get ~~overworked~~ by long marches and want of food & rest. This is ^{clearly} ~~not~~ ^{by accident as occurring} mentioned in European armies. It is characterized by rapidity without energy, feeble beat, no valvular murmur, incapacity to exercise, &c. Many soldiers often suffered from its ~~wrong~~ ^{very overdone} treatment.

ITS SYMPTOMS.

EXCITANTS.

Excessive use of alcohol, venereal ~~exercise~~ ^{cess} ~~exercise~~, and coffee, and, as Richardson says, tobacco, hurry the movements of the heart.

TEMPORARY PALPITATION.

Temporary palpitation is often caused ^{by asphyxia & by} nervousness. If kept up, hypertrophy ~~may~~ ^{will} result.

MECHANICAL OBSTRUCTION.

Mechanical obstruction of the venous blood, as by stooping, tends

~~Nephritis~~

~~Kidney phys.~~

~~Reg. foods~~

~~Ren~~

~~functions~~

~~Hygiene~~

Also, Bright's Disease,
[Watson] — how? Condition of blood?

Resistance in both kidneys to outflow
from aorta into renal arteries?

This resistance is not necessarily
always excessive.

Varicose veins —
& ulcers —

Therefore, rest, recumbent,
is necessary in their treatment.

End of 26th Lecture, 1873.

[Hawley, 1876:

Defn: Hygiene —

ancient — motem —

Personal & Public:

Domestic

of environment

of home &

children & maritime.

& clothes,

& food —

Food, of Personal Hygiene:

Drugs, of Personal Hygiene:

Alimentation (Food, Drink, & Stimulants &

Respiration (Atmosphere)

Circulation

of the Skin (Cloth & Bathing)

of Excretion —

Reproduction (Sexual Hygiene)

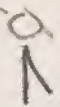
Mental Hygiene.

Public Hygiene —

Statistics

Artificial Statistics,

~~injury~~




TUBERCULOSUS.

to produce hypertrophy.

② A venous state ^{of the blood} is said to favor immunity from tuberculosis. (Rokitansky). Not well proven.

FULL AERATION.

① Full ^{al}eration of the blood is essential. A tight cravat or garter is injurious.  Tight Lacing!

SUDDEN APPLICATION OF COLD.

The sudden effect application of powerful cold, is unsafe. When heated ^{or fatigued} do not drink ^{too much of} ice water. It is not so much the heat, ~~but~~ the fatigue which makes it dangerous.

HYGIENE OF THE SKIN.

We next take up the

Hygiene of the Skin.

The uses of the skin are ^{several} ~~four~~ -
 (Secretory, Excretory, Sensitive, Protective.) Next to the stomach, the skin is abused more than any other organ. Under hygiene of the skin we shall consider clothing and Bathing.

FUNCTIONS OF THE SKIN.

CLOTHES.

Clothes were first adopted for ^{of appearance.} decency. In different countries, the manner of wearing ^{them} ^{quite} it is different.

It works differently in different constitutions.

Illustrate by two examples.

@ W.

R.R.

[Space 1/2 page]

"Limits of perfect recovery" in physics.

A ^{railway} bridge, e.g., made 4 or 5 times as strong
as is needful to support the passage of any one
train of cars over it; because
every strain (otherwise) impairs
its enduring power.

CUSTOMS.
DIFFERENT
OF
DIFFERENT
COUNTRIES.

Among the lower classes of Egypt, a woman will often expose her body so as to use the only clothing she has, to conceal her face from the eyes of men. ~~she wears feet, not hands~~ in mosque.

Pickering says that in the Pacific Islands, those who wear clothes become liable to colds.

~~The great principle of~~ ^{utility} ~~the~~ clothes ^{depends upon} is their being non-conductors of heat.

REQUISITES
OF CLOTHES.

1. Clothing must be 1st. sufficient, 2nd. not excessive in amount or pressure, 3rd. properly distributed, 4th. permeable to air & moisture, & 5th. changed for cleanliness.

NOT
WEARING
ENOUGH
CLOTHES.

Some men think it ^{promotive of vigor} ~~mainly~~ to wear as little clothing as possible. This is a mistake, we should always wear enough. [↑] Cattle-raisers find that it is economical to house their cattle in winter.

TEMPERATURE
OF
ROOMS.

The temperature of a sitting-room should be ^{69° or} 70°, especially in cold weather; that of an office 65°; that of

Q Heat of radiation & that of the air of a room
may be quite different at the same time.

* 1895, the tendency to inflation, in fashion, seems
the time to have passed by; contraction prevails,
approaching closely to a substantial basis. Whether
this is or is not to be followed by the pantaloon, or the
chemiloon, ^{no one} not even "Old Probabilities," can tell; as
Fashion, like necessity, knows no law, and very
little reason.

* Sleeping
we get colder -
provide accordingly
but not too much.

room in which people are working or moving about

somewhat less; that of a sick room
always as high as 70° - at middle of room.

EXCESSIVE
CLOTHES.

Excessive clothing overheats and
overburdens the body. The heavy
skirts of ^{modern} ladies ^{some years ago} were very bad. The
hoopskirts* accomplished the wished-
for expansion, and are ~~besides~~
~~very~~ hygienic. ~~superfluous dress~~ (further on)

ADAPTATION
TO THE WEATHER.

^{as remarked before} Tight Corsets are very injurious.

^{carefully} We should adapt our clothing
to the weather. In China, ^{it is said} some

CHINA.

^{about} ~~people~~ have six ~~sets~~ ^{garments} of clothes on
in the morning. Every hour, they
take off one, ^{begin to} till about noon, ^{then} put them on again.

NILE
BOATMEN.

On the Nile, the boatmen wear
pants, shirt, cloak, and shoes. If
it is warm they leave off the cloak;
if very warm, the pants and if
they have to get into the water, off
goes everything.

CHEST.

In the distribution of clothing,
the chest is the most important
to be covered, ^{especially in winter}. If we keep the chest
warm and leave the hands bare,

HIGHEST
SURF
TEMPERATURE.

<u>Highest Surf Temperature</u>	
Cape May	70° - 80°
Boulogne, France	65° - 70°
English Coast	68° - 72°
Normandy.	69°
Baltic Sea	66°
Mediterranean, Trieste	86°

PECULIARITIES
OF
SEA WATER.Peculiarities of Sea Water

1. It is stimulating to the skin, by the salts contained in it.
2. It is denser than fresh water, and by pressure tends more to send blood to the head.
3. The salts are to some extent absorbed, and act upon the secretions.

PRECEPTS.

Precepts.

Always wet the head soon and often, in bathing.

Remain in the surf only 15 minutes (for health).

End of 23rd Lecture, 1868.
22nd " 1867.

our hands &
if we wore gloves
exposed.

GREAT ORGANS

The chest contains
lungs. It is
heater - ~~the~~
of a furnace.

ABDOMEN.

Next to the
careful of the

It has no
more subject
sudden, change
flannel band
Warm weather

FEET.

In regard to
feet require the most care. They are
the farthest removed from the
heart, & thus the most easily chilled. Not to be too
rapidly heated, however, ^{Picture XXIII.} in very cold weather.

EVAPORATION

Clothing must allow ^{of transpiration and} evaporation.
During the inauguration of one of
the popes, a child was gilded to rep-
resent the golden age. The child died.
If the body be burned badly, even

BAD BURNS.

Now the account of
 Leo X to the papal
 Chair of Rome, there
 was a grand procession
 in Florence, the little
 girl was carried all
 over with gold leaf,
 to represent the "Golden
 Age." The child died
 in a few hours in
 convulsions, the spec-
 ulation being ignorant
 of the cause. That
 cause was, suppression
 of the cutaneous transpi-
 ration. In question since.

Highest Surf Temperature

May ————— 70° - 80°
 France ————— 65° - 70°
 Coast ————— 68° - 72°
 ndy. ————— 69°
 Sea ————— 66°
 anean, Sicote ————— 86°

Qualities of Sea Water

relating to the skin, by the
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End of 23rd Lecture, 1868
 22nd " 1867.

our hands will be warmer than if we wore gloves and left the chest exposed.

GREAT ORGANS

The chest contains the heart & lungs. It is so to speak, the great heater-~~the~~, just as in the case of a furnace. Especially the protected in winter & cold months.

ABDOMEN.

Next to the chest, we should be careful of the abdomen.

It has no bony casing and is more subject to vicissitudes of sudden change. Our soldiers wore flannel bands around the abdomen.

Warm weather relaxes the abdominal ^{organs}.

FEET.

In regard to the extremities, the feet require the most care. They are the farthest removed from the heart, & thus the most easily chilled. Not to be too rapidly heated, however, Picture XXIII. in very cold weather.

EVAPORATION

Clothing must allow ^{of transpiration and} evaporation. During the inauguration of one of the popes, a child was gilded to represent the golden age. The child died. If the body be burned badly, even

BAD BURNS.

* Change of clothes very important to the sick.

cc. spare 6 lines

Ext. - wound of arm undressed
2 weeks not undressed

means of drying precipitates, and if the doors are left open there will be but little danger of burning them; while if we wish a heat of one hundred and fifty or two hundred degrees Centigrade, it is easily obtained by shutting the doors. A small still set on one corner will furnish all the distilled water that is needed in a laboratory where not more than two or three are working, by running it one or two days in the week. And further, if there is a good draft we can easily melt a pound or two of any metal that has a lower melting point than silver, by placing the crucible in the fire. We are perhaps somewhat enthusiastic on the subject of a cooking stove, but we have just got possession of one again after doing without for a year or two, and we know how to appreciate it.

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scolding
in the
Loose
rc. g. boots
Lew. 30.
d oft.
We should

REMOVAL
OR
CLOTHING.

en enough. PRACTICAL RECIPES.

not wear the same, night & day.

Those who have to do so ^{when} sitting up all night, often feel refreshed by a bath ^{in the morning} on the morning.

SOLDIERS

^{in time of war} Soldiers suffer much ^{disadvantage} from their having to wear their clothes so long. They could sometimes be smelled across the street. Washing feet on march very important.

ADAPTATION
TO
CIRCUMSTANCES

Uncleanliness does not ^{always} injure ~~and~~ as much as would be expected. There is ^{some} ~~some~~ adaptation to circumstances. The other excretory organs help the skin.

SPOTTED
FEVER.

The fact that spotted fever is coincident with war or garrisons shows its ^{probable or at least possible} connection with uncleanliness. It ^{may be a} is a poison produced by

EXHALATION OF CARBONIC ACID BY THE SKIN. — Some interesting researches with regard to the amount of carbonic acid exhaled in a given time from the skin of a man, conducted by Herr Aubert, and his assistant, Herr Lange, have appeared in Pflüger's *Archiv für Physiologie*. The experiments have been carefully made in an airtight chamber, in which the subject for experiment was seated, and through which a current of air, freed from carbonic acid, was steadily passing, while the proportion of carbonic acid in the air on leaving the chamber was estimated by transmission through bulbed tubes containing a solution of a salt of barium. The results of these investigations lead to the general conclusion that sixty-two grains of carbonic acid are exhaled from the body of a full-grown man through the skin in the course of twenty-four hours. (*organic matter, also.*)

* Change of clothes very important to the sick.

cc.

pare 6 lines

Ext. — wound of arm undressed
2 weeks not undressed

less than half, death will follow.
 Any clothing which will prevent transpiration ^{is unhealthy} ~~is~~ ^{unhealthy}, hence care must be taken in the use of gum blankets, gum shoes, &c. ^{Loose} ^{g. Boots} ^{can so.}

REMOVAL
OF
CLOTHING.

Clothes should be removed often enough for cleanliness. We should not wear the same, night & day.

Those who have to do so ^{when} ~~by~~ sitting up all night often feel refreshed by a bath ^{in the morning} ~~in the morning~~.

SOLDIERS

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McNe Edwards' experiments with young animals.

3 young children in this winter (1868-9) some
 in one of our Northern States, were put into the bottom of a
 wagon by their parents, who had to take them a night journey of
 a number of miles. They were well wrapped up, in furs and
 blankets, they were perfectly quiet. At the end of the ride, the
 father & mother met & take them out — found them all
 dead!

Warmth of sick children, in bed.
 Cold blankets not always enough.

the long existence of foul matter in the clothes of soldiers.

CHILDREN.

Children require more clothes than adults, although it is not generally thought so. ^{their activity, of course, helps to keep them warm.} Their legs & arms, especially, should be protected. ^{Group, &c.}

L

~~Serious~~ ^{often} mistakes are made in regard to the dress of ladies. The term "full dress" ^{certainly} is a misnomer. It

"FULL DRESS"

~~may be worn well enough~~ in a warm room, but should the lady ^{stand} ~~stand~~ ^{for a little while} in a draft she is ^{very} liable to take cold. ^{So also, leaving a hot room, many persons are}

WARMEST MATERIALS.

The ^{usually stated} order of warmth of the materials used for clothing, is ^{furs &} wool, silk, cotton, and linen.

RUMFORD'S CONCLUSION.

Count Rumford ~~proved~~ ^{or the same thickness, even} that silk is warmer than wool. We ^{generally} under-rate the value of silk. It is a non-

ELECTRICITY.

conductor of electricity. Electric ~~charges~~ ^{occurrences} are constantly in the air. (See Venn's paper on effect of weather on operations. Pa. Hosp. Rep. 1869.)

FURS, &c.

Furs, down &c. are very warm. In the Arctic regions furs must be used; and they make the exposure there tolerable, - even ^{at} 40° or 50° degrees below zero.

✕ Open, loose fabrics are always
 warmer than compact, close ones; the air in the
 interstices is a slow conductor. Thus, e.g., the coldest
 things for the hands are tight kid gloves; the warmest,
 woolen or fur mittens.

The "What is it!"
 Grecian Band !!!

ADVANTAGES
OF
FLANNEL.

not only its nonconducting property

The advantage of flannel, is its porosity; ~~and~~ enabling it to absorb perspiration. It is also stimulating to the skin.

In tropical climates it keeps out heat (Ice in cellar, wrapped). Paper.

Those who ^{are subject to} ~~are~~ Rheumatism, neuralgia, ^{bronchitis,} or any ^{other} diseases which depend on ^{variations of} temperature should wear flannel all the year round.

FEET.

^{more or less} But it need not be heavy in summer. ~~The feet.~~ In Europe & America, the feet are less respected than in the East. There they ^{by refined people,} are kept perfectly clean. ^{so that} and to "kiss" the ^{as an act of homage or reverence} feet "is not ~~such~~ a ~~disgusting~~ ^{repulsive} practice. They don't ^{there} need such warm covering.

HEELS.

Shoes without heels are easiest to walk in, and loose shoes ^{that fit} are better than tight ones. High heels throw the body ^{unnaturally} forward (Ladies)!

FAULTS
IN
SHOES.

Our shoes are ~~not~~ made as they should be. They should have a wide sole, allowing room for the foot to ^{etc} spread out. Anatomical casts. There is some improvement in this within a few years.

By the way,

The first man to carry a silk umbrella
 * ^{for} ~~from~~ ⁱⁿ Philadelphia was Dr John Morgan; who, with
 Dr Shippen, was the founder of the Medical Department
 of the Univ. of Pennsylvania, more than a
 century ago. Umbrellas to keep off the sun
 are ancient in the East; in some oriental
 countries they are allowed to be used only by persons of
 high rank. The royal umbrella of the King of Ashantee
 was ~~lately~~ taken to England as a trophy (1817) by
 his conqueror, General Woodley.

Dio Lewis ←

WOODEN
SHOES.

Some parts of
In France and England, children often wear shoes with wooden soles. What is ^{so} saved in money, is lost in health & comfort. Barefoot better.

STOCKINGS.

Stockings should be adapted to the weather. Many cannot wear woollen stockings. A few require even peppered soles.

HATS.

For the head.

Hats are of modern origin.

MODERN.

need to

The Greeks & Romans did not wear any. The Mussulmans ^{shave their heads, except a top knot} wear ^{or turbans} forcaps & turbans. The turban keeps off the sun. Englishmen in India often wrap a veil around their hats. Use of an umbrella here, ^{our} hot rooms, is rational.

BALDNESS.

Heavy hats are unreasonable. They weigh on the brow, and exclude air, ^{perhaps this thing promotes or} ~~and~~ cause baldness. Women seldom lose their hair as soon as men.

LIGHT FELT.

The light felt ^{hat} is a great improvement. The ^{disputing} present style of ladies' hats is unquestionable, if they carry ^{sunshades} in the ^{hottest} weather.

OPEN
VESTS.

It ~~is~~ ^{was} once a common error to leave the breast almost uncovered. Old vests were open almost all the ^{fashioned}

X
^ Gymnastic dress: used often
by ladies for mountain excursions
in travelling.

"
The "Eretria head" was never seen nor heard of
in the classic Greece of Pausanias and Phidias.

End of Lecture 24th 1867
[End of Lecture 12th, 1872]

way down.

LADIES' DRESS.

about

At present the female dress is as ^{reasonably} good as it has ever been. There is plenty of ventilation below very ~~substantially~~, no doubt.

CANNOT EXERCISE.

It has one fault, however.

Ladies cannot take ^{proper} exercise. If the skirts did not go ^{so far} below the knees they would be better.

ARTIFICIAL

BEAUTY.

There is a tendency ^{among some people} to artificial ^{exaggeration to heighten} beauty, at the present time. ^{But} Beauty unadorned, is adorned the most.

We see no marks of corsets on the ancient statues! If the female figure were allowed to develop ^{naturally}, there would be more beauties than there now are. The best cosmetic is fresh air; the great beautifier is health.

BEDDING.

Bedding. — Hair, cornhusks, feathers, down, are the most and straw are the materials mostly used.

FEATHERS.

Feathers and down are ^{for healthy people} too soft. The hardest bed we can comfortably

^ Doubtful even for surgical cases. Expl.

Better, if possible, to remove pressure from affected parts, & to change position often, even if but a little. Most perfect bed, a good hair mattress or a feather bed, and this on a spring bedstead.

X Sick clothes
^

change often.

of course with case.

Patent sponge is ~~very~~ Confor. 165
table, and with care will serve well.
It must be very absorbent & demanding.
very good

will be
sleep on the better.

The hair mattress is the best.
Some people ~~try~~ to sleep on
air or water ~~beds~~; ? . A

AIRING
CLOTHES.

Frequent airing of clothes is ne-
cessary. They should be turned
~~over~~ ^{down} ~~as~~ ^{always} immediately on rising.
Dio. Lewis says that he restored
a person to health and sleep by
having his bed-clothes aired.

BATHING

Bathing was practised by the
ancients for health and religion.
~~Abutions made~~ ^a ~~was~~ part of the laws of the
Egyptians & Jews. The Mohammedans
took the custom from the Jews.

ITS
ANTIQUITY

ancient

The Greeks & Romans also practised
it. At one time there were over 600 in
baths in Rome. Some of the ~~one~~ ^{Roman baths} were
as large as small towns; as the
Baths of Caracalla; whose ruins yet remain.

ROME.

public

DIVISIONS
OF BATH

They had many apartments: an
undressing room, tepid bath, gym-
nastic room, cold bath, anointing
room, &c.

ORDER OF THE BATH.

The English adopted the Roman method. The Order of the Bath is of unknown origin, but, &c.

MIDDLE AGES.

In the Middle Ages, baths were much used for protection against leprosy.

NORTH EUROPE

~~Among the~~ In Northern Europe, bathing has long been practised: cold & warm.

VAPOR BATH.

The Russian bath consists of a room heated to 120° – 130° . The person remains about 10 minutes. He then goes into a room to be washed.

When that is done he ^{can} go out and plunges into the snow. ^{Often called Turkish B.}

HOT AIR BATH

In the hot air bath the temperature is 130° – 140° . ^{200°–250° Fahrenheit} Wilson testifies to the good of this kind of bath. Copious perspiration takes place. Water Baths are divided into cold, tepid, warm, & hot.

DIFFERENT KINDS OF BATHS.

Water softens the body. The principal effect depends on temperature.

— Different temperatures — page 134.

COLD BATH.

The cold bath has two effects. It is first depressing. If continued

DR. BELL.

long, this will be the only ^{result.} effect.
If we get out soon, there will be
a reaction. Dr. Bell denies this fact,
but he is wrong. This is the great
object in the bath.

COOL BATH.

^{cold} Delicate persons cannot use it.
The cool bath is ^{the most} used.
The tepid bath is best for ^{the} weak.

WARM
AND
HOT.

Warm & hot baths are only used in
certain ^{or for feeble or old persons.} diseases. Warm is relaxing - hot stimulant.

INFANTS.

Young infants require the water
to be as high as 90° - at first; carefully down.

SHOWER
BATH

The shower-bath is safer than the
plunge bath, in doubtful cases.

The hot bath is suited to those who
suffer from neuralgia, chills, anemia &c.

TIMES OF
USING
BATHS

Times of using baths — We should
not bathe after taking a full
meal. Just as a full meal ^{before sleeping} ~~causes~~ ^{may}
cause nightmare, so in this case.

Explanation

The best time is before a meal.
^{at best time or before breakfast will do very well.}

EXERCISE.

Exercise before bathing, is not
disadvantageous even if we are
^{Somewhat} heated provided we are not exhausted,
or out of breath or with quickened heart.

Good in skin diseases & chronic rheumatism
 & constipation; sometimes
 in affections of the liver: # useful especially in
dema, neuralgia, & chronic interstest.
& other chronic, cachectic affections.

End 23 Dec. 1861

* Coldest in Parma Salt Spr. 51°

Washington Virginia

Hot Springs, Calif. 200° - Reysers.

Salt baths at home - for feeble children &c.

Baths are simple or medicated. Oil, milk, blood, &c. have been used on particular occasions.

GAS BATHS.

In some ^{places, near mineral} springs, there are jets of CO_2 . In certain diseases, the body ^{may} be exposed to them. CO_2 has a pungent effect. If long continued, it is anæsthetic.

MEDICATED BATHS.

Medicated baths are ^{chiefly} saline, acidulous, chalybeate, & sulphurous. They have the same effects as when the components are taken into the stomach; but in less degree.

SULPHUROUS.

Thus Sulphurous water is alterative; chalybeate, is tonic.

SALINE.

Saline waters ^{mostly increasing them} affect the secretions. The benefit ^{of many mineral springs} is also due to local causes, change of scene, &c.

VICHY.

The ^{alkaline} baths of Vichy, in France are recommended ^{for} gout. ^{in Germany, 124°} ^{at the same season & latitude.}

EMS.

The water at Ems is 124°.

The highest in Europe is 150°.

TEMPERATURE OF THE SEA.

The temperature of the sea is lower than that of fresh water at the same season & latitude.

Evils & Dangers of Constipation

DANGERS
OF CONSTIPATION.

1. Irritation & Inflammation of the Bowels.
2. Hernia, & Strangulation.
3. Obstruction of the Bowels.
4. Sympathetic Disturbance of the stomach, brain, &c.
5. Blood-poisoning. (Septæmia) from arrest of excretion from the intestinal glands.
6. Hemorrhoids.

AIDS TO
THE BOWELS.

Aids to the Bowels.

1. Fruit, fresh or dried.
2. Bran bread, molasses &c.
3. Regularity of periods for defecation.
4. Kneading the abdomen.
5. Laxative medicines, as Rhubarb, &c.
enemata or suppositories sometimes; quæ vom. & electuaria in old tedious cases.

CAUSES
OF CONSTIPATION.

Causes of Constipation.

1. Accumulation in the Rectum from neglect, & obstruction.
2. Deficient peristaltic muscular power.
3. Deficient innervation.
4. Insufficient Intestinal secretion.

DENSITY.

The ^{gentle} stimulation of the ^{skin by the} water, makes sea bathing ^{more refreshing} ~~better~~ than ^{that in inland waters,} fresh, but its greater density tends to drive the blood to the head. The head should be dipped soon & often. The density of sea water is ^{much} greater than that of fresh water. It is easier to float in it. ^{to be beneficial.}

SHORT BATH.

The ^{surf} bath should be short. Fifteen minutes is long enough. ^{This is} the report of a French physician after many years observation at Boulogne. ^{lecture XXIV.}

HOW TO PREVENT COLD.

~~Attempt of a champion swimmer, Brit. Channel, 1872 - throat 3/4, almost dead.~~
A very good way to avoid taking cold, is to bathe the neck & chest every morning, in cold water. Cold water warms better than hot does.

Our next subject is → (skin, 1871)

Hygiene of the Hair.

HYGIENE OF THE HAIR.

VEGETABLE.

Hair is a vegetable growth. If allowed to get matted, it dies at the ^{rooted growing point.} roots, like a ^{away} ~~It~~ grows after death. It is necessary to keep the head clean, but too much washing is injurious. It washes ~~out~~ the natural grease.

WASHING.

GREASE.

Grease should be used, only when

with oil of bitter almonds for preservation of odor.

[End of Lecture 13th, 1872] ←

Alexander the Great first made his soldiers remove the beard —

* Roman Soldiers, & gladiators —

Papal mummies at Court of France
Beardless Louis XIII & in Spain Philip V.

Cromwell — Round heads & Carthage

Ten years ago, it was ~~hardly~~ ^{hardly} respectable in England to wear a
moustache. The ~~Continental~~ ^{Continental} European custom spread first to America,
& now more doing in England.

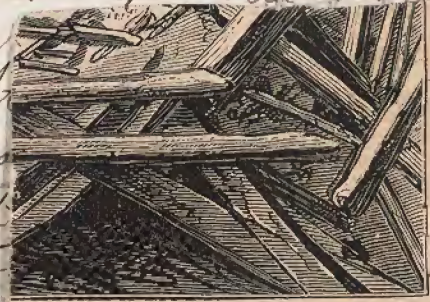
(Too much hair is the fault of fashion
with ladies at the present time (1871). And not only women
or bought locks of hair, — but barbarous compounds of other
kinds to substitute it. The chignon is an abomination.
I believe it is now, happily, disappearing in most places (72)

OBJECTS USED.

necessary, from deficiency of the natural catarrhus matter.
Cantharides, ammonia, & castor oil
are most commonly used for the hair.

BEARD.

If the hair be lost from illness, it should
be shaved & afterwards kept cut close.
It has often been



SHAVING.

to wear the beard. It
protects the throat.
^{as a natural respirator.}
It is strange that
be so ^{nearly} universal. I
ple, ^{thus interfering with the} shave the mod
shaving is obscure.

Leit. law

shaved ^{except} when they were mourning.
The next subject is the

Hygiene of the Teeth.

HYGIENE OF THE
TEETH.

EARLY DECAY IN
AMERICA.

In this country, the teeth decay
very soon. At a Dental Convention
held some years ago, four causes ^{for this} were
suggested viz:

ACIDITY.

1st. Acidity of our food. This is
not so. Acid will dissolve the mineral
part of teeth so, that it is not safe
to ^{allow} ^{to be long in contact with them} eat even alum. The only way
in which it is possible for acid

with oil & bitter almonds for preservation of odor.

[End of Lecture 13th, 1872] ←

Pliny states that the Romans did not begin to shave till the year of Rome 454, when Publius Ticianus brought over a cargo of barbers from Sicily. He adds that Scipio Africanus first set the fashion of being shaved every day. But, according to the same authority, after the age of forty-nine, every man was expected to wear his beard long. Young men underwent their first snipping at the age of twenty-one, and visits of ceremony were paid on that important occasion. The first chip crop was devoutly inclosed in a small gold or silver box, and then presented as a votive offering to some divinity, mostly Jupiter Capitolinus. The first fourteen Emperors of Rome were shorn, down to Adrian, who revived the beard to hide certain blemishes on the imperial skin. Beards held their own till Constantine, whose mother, Helena, became famous as the "invent-

Great first made his soldiers remove the beard -
Soldiers, & gladiators -

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OBJECTS USED.

necessary, from deficiencies of the natural sebaceous matter. Cantharides, ammonia, & castor oil are most commonly used for the hair.

BEARD.

If the hair be lost from illness, it should be shaved & afterwards kept cut close. It has often been asked if it is good to wear the beard. It is, certainly. It protects the throat against cold; perhaps, also, the vocal apparatus.

SHAVING.

It is strange that shaving should be so nearly universal. The plainest people shave the most. The history of shaving is obscure. The Egyptians shaved when they were mourning. The Jews shaved before going to the tomb. The next subject is the

HYGIENE OF THE TEETH.

Hygiene of the Teeth.

EARLY DECAY IN AMERICA.

In this country, the teeth decay very soon. At a Dental Convention held some years ago, four causes were suggested viz:

ACIDITY.

1st. Acidity of our food. This is not so. Acid will dissolve the mineral part of teeth so, that it is not safe to eat even alum. The only way in which it is possible for acid

in affections.

†
^ Not impossible: — amount of lime in soil
has been found to affect the size of bones
in cattle pastured upon it.

○
Leptothrix lancealis. —

End of 24th Lecture, 1868.

unfavorably on the teeth

INDIGESTION.

to act as in indigestion, acid being formed in the stomach and thrown into the mouth.

WANT OF LIME.

2nd. Want of lime in our food. That this is not ^{probably} so is proved ^{by the fact} that phosphate of lime passes in our excrement, showing that there is an excess of it in the body. (?)

INHERITED PROCLIVITY.

3rd. Inherited race proclivity. This has no doubt some effect. The negroes have good teeth. The English lose their teeth soon. ^{Egyptians, boatmen, wine, & c.} Irish children, ^{also milk-bait} ^{as they came out.}

HASTE IN CHEWING.

4th. Haste in chewing. This is the cause. Fibres of meat get between the teeth and decaying there, ^{mitigate} decay the teeth. Imperfect mastication produces indigestion ^{also} so that acid ^{results} thus helps. ^{Americans habitually eat too fast.}

TARTAR.

Tartar is a ^{mineral deposit & minute} vegetable growth on the teeth. Some say it is protective. A sound, ^{smooth} clean tooth is much better.

CLEANING THE TEETH.

Cleaning the teeth, at least once a day, is important. ^{Properly} Hard rubbing ^{with a brush} is safe.

POWDERS.

The best tooth powder, is, ^{made of very fine} charcoal,

Castile Soap very good —

End 24th Lecture, 1870

* Exclusively so — large intestine & kidneys:
partially — liver, lungs, & skin.

C. soap, myrrh, & ^{may be made off hand with} Peruvian bark.

TOOTH
WASH

A good tooth wash ^{in a tumbler} about 10 drops of tincture of myrrh, in a glass of water. The myrrh acts on ~~the~~ exposed nerve and prevents further decay.

TOOTH-ACHE

EXPOSED
NERVE.

There are three kinds of toothache.
1st. Exposed ^{in a hollow tooth} nerve. This is the most common.

INFLAMMATION

NEURALGIA

2nd. Inflammation (cold in face)
3rd. Neuralgia.

CREOSOTE.

We have the most control over the first. Creosote is a certain cure. It coagulates the neurine.

OTHER
OBJECTS
USED

Oil of cloves, laudanum, chloroform, ^{acetate of lead,} speckles, & tobacco fumes are sometimes used. Prevention when teeth are tender.

HYGIENE
OF
EXCRETION

The next subject is the
Hygiene of the Excretory Organs.

The liver is not excretory only.

LIVER.

We have no direct control over it. Mercury ^{in morbid states} does affect it. ^{concomitant} Dr As. Bennett is a specialist.

Diseases of the liver are frequent in hot climates. ~~Therefore~~ we should ~~avoid~~ avoid excess of food which ^{rich, fatty}

* Gastro-hepatic catant of Dr. Chambers.

o Cholemia, cholesteronemia of Flint,

End of 25th Lecture
1867

✕ It is natural to almost every one, in health, to have one evacuation daily. I have known one man, for years together, in perfect health, to average 2 passages daily. A ^{medical} gentleman attending my lecture on this subject in 1874, told me of a blacksmith who lived to be 74 years old, who for 40 years averaged but one passage in 9 days — yet with good health, except rectal prolapses. During sea-sickness the bowels (as well as kidneys) act very slowly. I have been, at sea, 7 days without any movement of, or accumulation in, the bowels. E. H. B. told me had been 11 days at sea without a passage.

requires the assimilating & action of the liver. Alcoholic drinks also stimulate or irritate the liver, & do the most harm in hot climates & seasons.

BILIOUSNESS

The term biliousness is misused.

Simple nausea, of the stomach, is sometimes so called.

DIFFERENT KINDS.

Inflammation of the ~~intestine~~ ^{not, un-} involving the liver, is common.

In real biliousness there are certain signs: yellow tongue, eyes, & skin; bitter taste; nausea; & dizziness. Light or simple diet is good for it; also, blue mass, bicarbonate of soda and magnesia.

Especially on turning the eyes quickly

BOWELS.

Bowels:— We have the most direct control over them.

NEGLECT.

Neglect will cause constipation, though this may be ~~produced~~ ~~by~~ other things. The longer the neglect, the greater the evil.

ABSORPTION.

The mucous membrane of the large intestine can absorb the liquid portion of excrement. This will make the excrement so hard that it ~~will~~ be impossible to expel it.

Wheat - Comp. Ext. Colocynthis -
 Rhubarb - Senna with asfoetida or anise -
 Magnesia - Sulphur - Ext. Hyoscyamus - Resin of Podophyllum
 Ext. nuc. vomice. - ~~Ext. Belladonna~~ - Quemata &
Suppositories : Warm soap water, - Hellor soap.
 In children, given occasionally - mannu -

one of the of health; 'non fortiter comprimere animum';

P. 172

Evils and dangers of constipation (page 172)

Causes. It is a primary rule not to allow the anus forcibly to compress itself.

We should use good food, fruit in season. All fruits are good. Bran bread is good. Regular time for defecation. Most people find after breakfast, the best time, though any will do.

Causes of Constipation (page 172)

The bowels are also aided by pressure; and mild cathartics.

Deficiency of innervation is seen in studious men particularly.

Exercise promotes regularity.

Urine: - Neglect will not produce any serious effects except local irritation. It is almost impossible to detain the urine very long. Gravel is promoted in those who have such a tendency to it, by too long detention.

When the kidneys do not act sufficiently, the skin acts more. On a cold day when the skin

HOW TO PREVENT CONSTIPATION apple prunes

STEWED PRUNES. PAGE - 191

PRESSURE.

INNERVATION.

URINE.

Alcoholic drinks promote defecation produce disease of kidneys.

SKIN & KIDNEYS.

^ Care of the skin is, therefore, virtually
 at the same time care of the kidneys.

(Sabbath
 morning)

□ I saw a ^{some time since} patient ~~a few weeks ago~~ (A.P., 1872), in whom,
 there being heart-disease with aortic regurgitation, and ~~very~~
 probably ^{also} embolism of the ulnar artery, the left hand became
 gangrenous.

I made force)



